

### **IN THE SPECIFICATION:**

Please amend the Specification as follows.

Please REPLACE paragraph 0028, 0031, 0034, and 0045, with the following corresponding rewritten paragraphs:

[0028] Supply 204 also may be connected to other circuit elements, such as element 228. Element 228 may be a gate or diode coupled to a bandgap reference ~~226~~236. Bandgap reference circuit ~~226~~236 may draw current from supply 204, in addition to oscillator 202. Current 216 may be referred to as a bias current. Element 228 and bandgap reference circuit ~~226~~236 may act as a current mirror used in an integrated circuit for biasing. Bias current 216 can be generated by drawing some of the supply current from supply 204 to element 228 to oscillator 202.

[0031] Current source 224 can be coupled to the input of oscillator 202. Current source 224 also is coupled to noise reduction circuit 206. Current source 224 also may be known as a varactor. Preferably, current source 224 acts as a common source amplifier. Further, current source 224 may comprise a first semiconductor material. For example, current source 224 may comprise a p-channel metal oxide semiconductor (PMOS) diode having its drain coupled to oscillator 202 and its source coupled to supply 204 via noise reduction circuit 206. The gate of current source 224 is coupled to noise reduction circuit 206 and subject to bias current 216 generated by bandgap reference circuit ~~226~~236 and element 228. Current source 224 may have a gain that is applicable to a noise component within supply current 226. Noise reduction

circuit 206 seeks to reduce the gain of current supply 224 and reduce the bias current 216 flowing into its gate.

[0034] Thus, noise reduction circuit 206 may be configured to have low pass filter 210 between a current mirror such as element 228 and bandgap reference circuit ~~226~~236, and a current source 224 coupled to an input of oscillator 202. Bias current 216 can be filtered accordingly, and the bias noise component is reduced before reaching current supply 224. This feature, in turn, may reduce the noise component of input signal 208.

[0045] Step 300 executes by generating a bias current, such as bias current 216. The generated bias current includes a noise component that is input to a gate of a current source for an oscillating circuit. For example, bias current 216 flows into the gate of current source 224. The bias current may be generated by a current mirror, such as band gap reference circuit ~~226~~236 coupled to supply 204. Step 302 executes by filtering the bias current to remove the bias noise component using a low pass filter, such as low pass filter 210. The low pass filter includes a capacitance and a resistance that removes the noise that is not within an allowable range. Step 304 executes by reducing the noise component in the bias current by removing the noise component.